

**REMARKS**

Claims 1-39, 55, 57-59, 62, 64-66, and 71-73 are now present in this application, with claims 40-54, 56, 60-61, 63, 67-70 and 74-78 being cancelled without prejudice or disclaimer of the subject matter contained therein. Currently, claims 1, 14, and 27 are independent.

**Telephone Interview of November 9, 2006**

Applicants wish to thank Examiner Spooner for the telephone interview conducted on November 9, 2006. The substance of the interview is reflected in the response, noting that the claims were slightly modified from the amendments discussed to add to the clarity of the claims.

**Discussion of Example Embodiments**

In one example embodiment of the present application, morphing functions are combined with symbol sequencing by the use of dependent symbol sequences. A dependent symbol sequence is one which includes at least one input symbol that is not used to directly access a stored word, but which will instead trigger the use of a target symbol to access a word and which will be used in morphing the stored word.

For example, reference is made to page 27 of the specification. First, assuming that the taxi symbol is a first symbol entered by the user and "ich" symbol is the next symbol, the input taxi symbol plus the "ich" symbol does not complete a regular symbol sequence. Thus, there is no symbol sequence of the taxi plus the "ich" symbol which is stored in association with a word, message or phrase, etc. which can be accessed.

However, the "ich" symbol is a dependent symbol, and it is part of a dependent symbol sequence (namely, a sequence of symbols dependent upon at least one other symbol). This system recognizes this, and in essence substitutes the target of the "ich" symbol in the dependent symbol sequence to produce a regular symbol sequence (the "wir" symbol is

substituted for the “ich” symbol in the dependent sequence to form a new sequence of “taxi” plus the “wir” symbol) Thus, the “ich” symbol is not used to directly access a stored word, but instead will instead trigger the use of a target symbol (the “wir” symbol) to access a word and will be used in morphing the stored word. It therefore in essence substitutes the “wir” symbol for the “ich” symbol in the dependent symbol sequence, to form the sequence that would normally access the word “fahren” (“taxi” plus “wir”). However, instead of merely retrieving the word “fahren”, the word “fahren” is retrieved along with the appropriate morphing data and the appropriate insertable morphing functions, such that the word “fahre” is then generated.

As such, a plurality of symbols are received, and it is determined whether or not the plurality of symbols include one of a plurality of dependent sequences of symbols (one which is not merely a sequence of symbols that will directly access a word, phrase, message), wherein the dependent sequence is dependent upon at least one other symbol. A stored word corresponding to a sequence of symbols including the at least one other symbol is then morphed, the morphing being based upon at least one of the input symbols not included in the sequence of symbols corresponding to the stored word (in the example case, this is the “ich” symbol), to produce at least one modified form of the stored word.

#### **Prior Art Rejections**

Claims 1-39 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Steele et al. (the Steele ‘342 patent). This rejection is respectfully traversed.

#### **Steele et al.**

The Steele ‘342 patent is directed to an interactive communication system designed for users such as an aphasic patient. Aphasics typically have deficiencies, cannot easily understand language, and typically have problems with syntax. The device includes a display of a plurality of images, with each image being a single meaning graphical representation of a word or phrase (see figure 13E including the single meaning measuring cup for

example, and/or the various symbols for the chef, the pouring, etc. of figure 13G).

As indicated above, aphasics typically have problems with syntax. Thus, as indicated in column 3 of the Steele '342 patent, the patent does deal with syntax. This syntax analysis typically is done in conjunction with two adjacent symbols, wherein **each symbol is a single meaning symbol and has a separate word associated with it** and wherein at least one of the words may be altered based upon a single proceeding adjacent symbol as discussed in column 4. Specifically, as discussed in column 5, if a dog and walk symbol are selected, the phrase "dog walks" will be output.

Thus, as a sequence of symbols is input, each input symbol corresponds to a stored word and each sequence of symbols corresponds to a sequence of words.

#### **Distinctions over the Steele '342 Patent**

As discussed in the interview, the Steele '342 patent fails to teach or suggest dependent sequences, wherein a word corresponding to **a sequence including one symbol other than the input symbols** is morphed ... in response to determining that the plurality of input symbols included a dependent sequence...wherein the **morphing is done based upon an input symbol not included in the sequence of symbols corresponding to the stored word**, and wherein at least one symbol in the dependent sequence is polysemous. In the Steele '342 patent, **each symbol corresponds to a specific word** (the chef symbol corresponds to a chef, the pour symbol corresponds to a pouring action, the measuring cup symbol corresponds to a measuring cup, etc.). Thus, each symbol is "single-meaning" and thus is not multi-meaning or polysemous.

Further, each "single-meaning" symbol in the Steele '342 patent is used to access a word or some form of a word. There are no symbols in the Steele '342 patent which are input, used for morphing, and not included in a sequence of symbols corresponding to a stored word (such as the "ich" symbol for example, wherein if the taxi and "ich" are input, the symbol

sequence of the taxi and “wir” symbols access the word, and then the word is modified based upon the “ich” symbol). Accordingly, the Steele ‘342 patent cannot anticipate independent claim 1, nor any of independent claims 14 and 27, in that each of the aforementioned claims have been amended to state that they are polysemous.

Further, reference is made to the Examiner’s attempted use of Fig. 12a and 12b of the Steele ‘342 patent and the word drink. However, just like the symbols for “chef” and “pour” in Fig. 13g, a single meaning symbol for drink must also exist. When that symbol is input, it is used to output a corresponding word drink, or some form of that word. In the Steele ‘342 patent, the “chef” symbol will never mean “to cook” for example, it will always mean “chef” no matter which other symbols it is used with. When input, it will always access the same word or a form thereof. The Steele ‘342 patent only teaches linking single meaning symbols, and has nothing to do with creating symbol sequences using polysemous symbols whose meaning varies depending on the sequence. To the contrary, the “taxi” symbol is polysemous and can be used to access other words, phrases, messages, etc. when combined with other symbols.

Accordingly, withdrawal of the rejection of claims 1, 14 and 27 (and all claims dependent thereon) is requested.

Additional distinctions

Further, the Steele ‘342 patent fails to teach or suggest at least a method “determining whether or not the plurality of symbols include one of a plurality of dependent **sequences of symbols, dependent upon** at least one **other symbol**” as well as “morphing a stored word **corresponding to a sequence of symbols** including the at least one other symbol”, as set forth in claim 1. In the Steele ‘342 patent, each symbol is single meaning and corresponds to a specific word (the chef symbol corresponds to only a chef, the pour symbol corresponds only to a pouring action, the measuring cup symbol corresponds only to a measuring cup, etc.). Although the patent does not specifically describe how this occurs, the system does appear to

recognize which symbol corresponds to the subject and which symbol corresponds to the verb, and further appears to somehow correlate a singular verb form with a singular noun form ("the chef pours" as shown in figure 13G for example). Accordingly, one symbol may thus in some way relate to another symbol, and its corresponding word output may be modified. However, this kind of a system as set forth in the Steele '342 patent still fails to meet the claim limitations of claim 1.

In claim 1, a plurality of symbols are input, and it is determined whether or not the plurality of symbols include "one of a plurality of dependent sequences of symbols, dependent upon **at least one other** symbol". Thus, by referring to a "**dependent sequences** of symbols", this clearly refers to at least two symbols being dependent upon at least one other symbol (for example, the input "taxi" and "ich" symbols are dependent upon the "wir" symbol). In the example set forth in the Steele '342 patent, the pour symbol is not really dependent upon the chef symbol, but it is somehow related to the chef symbol. At best, however, only a single symbol, the "pour" symbol, changes its output (pours) based **upon another input** chef symbol. Thus, in **the Steele '342 patent**, it is at best, **a one to one correspondence**. This has nothing to do with any sequence of input symbols **dependent upon** at least one other **symbol (which is not an input symbol...noting that claim 1 defines functions of basing morphing on an input symbol not included in a sequence used to access a word, message, phrase, etc. and further defines at "other symbol (one which is not input), as being used in accessing a stored word)**. Accordingly, withdrawal of the rejection of claim 1 is requested. For at least somewhat similar reasons, withdrawal of the rejection of claims 14 and 27 is also requested.

In addition, the Steele '342 patent also fails to teach or suggest "morphing a stored word corresponding to **a symbol sequence including the at least one other symbol**", as claimed in claim 1. Thus, the word that is morphed is one which corresponds to a symbol sequence, **and not just a single symbol as shown in the Steele '342 patent**. For example, the Examiner argues that the word "pour" is morphed into the word "pours" in

the Steele '342 patent. However, the **word "pour" corresponds only to the "single" pouring symbol**, and does not correspond to any type of symbol sequence. Accordingly, for at least such reasons, Applicants respectfully submit that the Steele '342 patent fails to teach or suggest the present invention as set forth in claim 1.

With regard to independent claims 14 and 27, these claims are allowable for reasons at least somewhat similar to those set forth in claim 1, although each claim should be interpreted solely based upon the limitations present therein. Accordingly, withdrawal of the rejection of each of independent claims 1, 14 and 27, as well as the various dependent thereon, is respectfully requested.

#### Dependent Claim Arguments

Further, as set forth in claim 55, the **dependent sequence** of symbols **may not include a word corresponding thereto**, such as the taxi and ich symbol sequence not corresponding to any particular word, phrase or message. Thus, for example, the symbol sequence of the taxi and the ich symbol is a sequence of symbols (more than one symbol) dependent upon at least one other symbol.

There is no such sequence of symbols dependent upon at least one other symbol as shown in the Steele '342 patent. **Each symbol is single-meaning;** and each is independent of the others and independently stands for its own word.

Further, with regard to claim 57, at least one symbol in the dependent sequence dictates a type of morphing to be done to a stored word (such as the word "ich" dictating that the word "fahren" be morphed to "fahre" for example). With regard to claim 59, the dependent sequence of symbols includes at least one symbol only selected to control morphing (such as the "ich" symbol for example"). There is no such dependent sequence of symbols including such a symbol as claimed in claim 57 or 59, shown in the Steele '342 patent.

Accordingly, withdrawal of the rejection of these further dependent claims is respectfully requested.

**Freeman '233 Patent**

The Examiner has further rejected claims 40-54 and 76-78 under 35 U.S.C. § 102(b) as being anticipated by Freeman (the Freeman '223 patent). This rejection is respectfully traversed. In order to expedite prosecution, the rejected claims have been cancelled. Thus, this rejection has been rendered moot in view of the cancellation of claims 40-54 and 76-78.

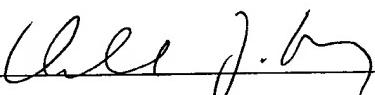
**CONCLUSION**

Accordingly, in view of the above amendments and remarks, reconsideration of all outstanding objections and rejections and allowance of each of claims 1-39, 55, 57-59, 62, 64-66, and 71-73 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,  
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